

V. REMARKS

In the final Office Action:

Claims 9 and 11 are rejected under 35 USC 112, first paragraph, as allegedly failing to comply with the written description requirement. The claims are canceled and, as a result, the rejection as applied thereto is now moot.

Withdrawal of the rejection is respectfully requested.

Claims 1-3 and 5 -9 are rejected under 35 U.S.C. 103(a) as unpatentable over Koller (U.S. Patent No. 5,728,297) in view of Lynch (U.S. Patent No. 5,587,074). The rejection is respectfully traversed.

Koller teaches an apparatus for the mechanical cleaning of liquids, especially cooling water delivered from a heat exchanger and flowing in a pipeline, with a rotationally symmetrical, conical sieve of substantially the size of the pipe diameter, as well as a coaxial suction device which is disposed on the upstream side of the sieve, is mounted for rotation continuously or with interruptions for the duration of a cleaning interval, and during the cleaning interval sucks bit by bit the entire surface of the sieve on the upstream side. The sieve is divided into areas, the intake nozzle of the suction device can cover each area, and in each area of the actual sieve surface and of the suction device there is a cavity for the temporary accommodation of contaminants. The sieve is divided on its upstream side by substantially radial barriers into individual sectors forming the areas. The intake nozzle of the suction device has such a shape that, at the moment in which the intake nozzle just covers one sector, and leaves adjacent sectors substantially free. The gap between the free barrier edges and the edges of the intake nozzle of the suction device is spanned by flexible sealing lips of at least the height of the gap. Preferably, the apex of the cone has no barriers and the ends of the barriers disposed in the remaining area have no terminations so that funnel-shaped chutes result which are open on the upstream and downstream ends so that hard contaminants, such as stones, mussels, will slide along the sieve surface into the barrier-free cone apex and are there sucked away from the opening present in the coupling tube.

Lynch discloses a backflush conduit for an automatic backflushing filter that includes a flared inlet portion, an outlet portion and a transition portion. The flared inlet portion converges inwardly from an inlet aperture in the direction of backflushing flow. The outlet portion has a generally cylindrical shape and is oriented at an angle with respect to the inlet portion. The transition portion connects the inlet portion and the outlet portion. The transition portion turns through the angle while converging to the outlet portion. The inlet portion has an interior with upper and lower walls. The upper and lower walls are symmetrical and convex relative to each other and converge in the direction of backflushing flow through the conduit toward the transition portion. The conduit has a streamlined interior contour to enhance fluid flow therethrough and supports a substantially even rate of fluid flow across the inlet aperture.

Claim 1, as amended, is directed to a filter for filtering solid particles from a flowing liquid, especially for use in steam condensers and heat exchangers in thermal and nuclear power plants. Claim 1 recites that the filter includes a cylindrical housing (4) extending longitudinally along and about a central axis, a conically-shaped screen basket (2) located within the housing (4), a debris discharge pipe (1) extending longitudinally along and about the central axis within the housing (4) and operative for discharging accumulated and captured debris; a debris extractor arm (3) connected to and extending from the debris discharge pipe (1) and located at a predetermined distance above the screen so as to maintain an open gap between the bottom surface of the debris extractor arm and the screen basket (2).

Claim 1 further recites that the debris extractor arm (3) includes a pair of pentagon-shaped panel members, a first side connecting member, a second side connecting member, an intermediate side connecting member and an elongated trumpet-shaped inlet nozzle,

the pair of pentagon-shaped panel members being disposed apart from one another in a facially-opposing mirrored relationship, each pentagon-shaped panel member having a long edge, a first intermediate edge, a second intermediate edge, a first short edge and a second short edge with the long edge being longer than the first intermediate edge, the second intermediate edge, the first short edge and the second short edge and the first and second intermediate edges being longer than the first short edge and the second short edge and with the long edge being contiguous to and

between the first and second short edges, the first intermediate edge being contiguous to and between the first short edge and the second intermediate edge and the second intermediate edge being contiguous to and between the first intermediate edge and the second short edge,

the first side connecting member connected to and between respective ones of the first short edges, the second side connecting member connected to and between respective ones of the second short edges and the intermediate side connecting member connected to and between respective ones of the second intermediate edges thereby defining a debris extraction channel with opposing ones of the long edges and the first and second side connecting members defining a debris inlet into the debris extraction channel and with opposing ones of the first intermediate edges, the first side connecting member and the intermediate side connecting member defining a debris outlet from the debris extraction channel for fluid communication with the debris discharge pipe,

the elongated trumpet-shaped inlet nozzle connected to the respective ones of the long edges, the first side connecting member and the second connecting member, the elongated trumpet-shaped inlet nozzle having a curvature towards the screen and extending outwards at a predetermined radius with a respective vertical plane to create a low pressure between the debris extractor arm (3) and the screen basket (2) for complete extraction of debris and conveying to said debris discharge pipe (1).

Claim 7, as amended, is directed to a cooling system that includes an inlet (9) and an outlet (8) for cooling water, a debris filter, a debris outlet valve (10), a debris output pipe (11) and a condenser (12) for heat transfer. Claim 7 recites that the debris filter with a debris extractor arm (3) that includes those features now recited in claim 1, as amended.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggest the features of claims 1 and 7, as amended, particularly the features of the debris extractor arm. Thus, one of ordinary skill in the art would not be motivated to combine the features of the applied art because such combination would not result in the claimed invention. As a result, it is respectfully submitted that claim 1 is allowable over the applied art.

It is respectfully submitted that the features of the debris extractor arm now recited in amended claims 1 and 7 are illustrated in Drawing Figures 3-6.

Claims 2, 3 and 6 depend from claim 1 and include all of the features of claim 1. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 1 is allowable as well as for the features they recite.

Claims 5, 8 and 9 are canceled and, as a result, the rejection as applied thereto is now moot.

Withdrawal of the rejection is respectfully requested.

Claims 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as obvious over Koller in view of Lynch and Muller (U.S. Patent No. 4,867,879). The rejection is respectfully traversed.

Muller discloses a device for mechanically purifying liquids in a pipeline that includes a rotation-symmetrical sieve chamber forming a section of the pipeline and having an inlet with a central axis, a rotation-symmetrical sieve body having an inner surface and being disposed in the sieve chamber at an angle of substantially 30° to 60° relative to the central axis of the inlet, and a suction removal device for removing deposits from part of the inner surface of the sieve body. The suction removal device is coaxial with and upstream of the sieve body in flow direction of the liquid, and the sieve body and the suction removal device are rotatable relative to each other for successively sweeping all of the inner surface of the sieve body with the suction removal device.

Claim 7 is amended as discussed above.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggest the features of claim 7, as amended, particularly the features of the debris extractor arm, and as discussed above. Thus, one of ordinary skill in the art would not be motivated to combine the features of the applied art because such combination would not result in the claimed invention. As a result, it is respectfully submitted that claim 7 is allowable over the applied art.

Claims 10 and 11 are canceled and, as a result, the rejection as applied thereto is now moot.

Withdrawal of the rejection is respectfully requested.

Further, Applicants assert that there are also reasons other than those set forth above why the pending claims are patentable. Applicants hereby reserve the right to submit those other reasons and to argue for the patentability of claims not explicitly addressed herein in future papers.

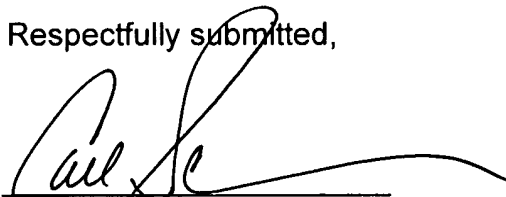
In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

Date: December 1, 2006

By:


Carl Schaukowitch
Reg. No. 29,211

RADER, FISHMAN & GRAUER PLLC

1233 20th Street, N.W. Suite 501

Washington, D.C. 20036

Tel: (202) 955-3750

Fax: (202) 955-3751

Customer No. 23353

Enclosure(s): Amendment Transmittal
 Petition for Extension of Time (three months)
 Request for Continued Examination